

27. SEXUAL DIMORPHISM IN CAT FISH *OMPOK BIMACULATUS* (BLOCH)

(With two text-figures)

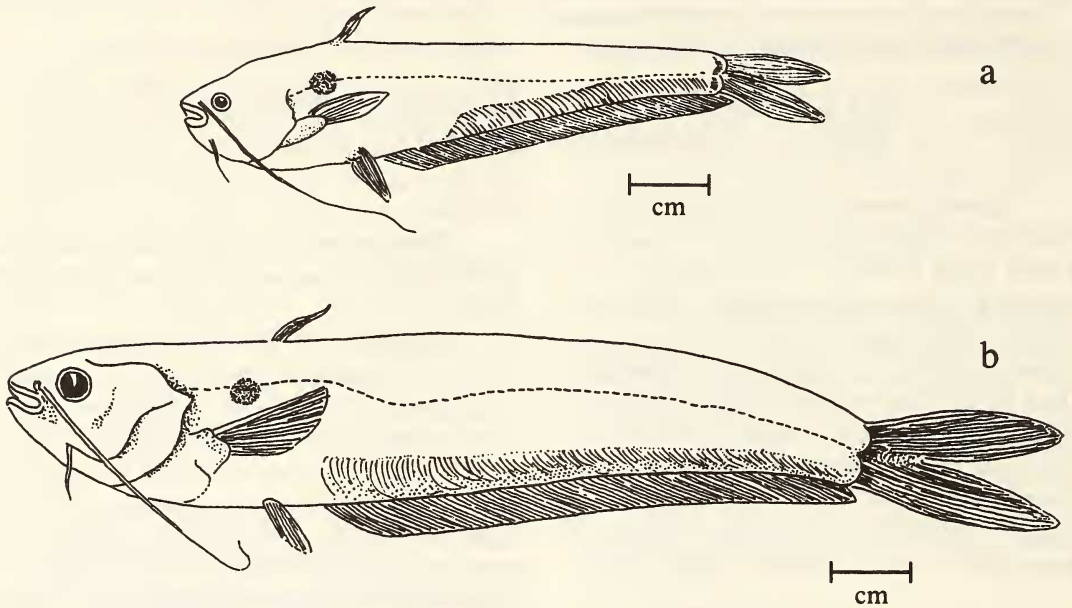


Fig. 1: *Ompok bimaculatus* (Bloch): a. male; b. female.

The study of sexual dimorphism is important in taxonomy, bionomics and reproductive biology. It is also significant in biodiversity assessments. This paper deals with sexual dimorphism in an edible cat fish *Ompok bimaculatus* (Bloch).

The genus *Ompok* (Lacepede) has three species: *Ompok bimaculatus* (Bloch) *O. pabda* (Hamilton) *O. pabo* (Hamilton).

Thobias (1974) reported on the sexual dimorphism of the filament barb *Puntius filamentosus* (Val.). Inasu (1993) observed sexual dimorphism in a freshwater puffer fish, *Tetraodon travancoricus* Hora and Nair. Tessy and Inasu (1997) worked out the sexual dimorphism of an edible perch, *Priacanthus hamrur* (Cuv. and Val.).

Twenty adult specimens were collected from Muriyad (Kole land) and Nedumbal (Kole land) of the inland waters of Trichur dist., during

June-September 1997. The body cavity of each fish was cut open and the gonads were exposed. Specimens with testes and those with ovaries were separated. Morphological differences between the two groups were studied and illustrated.

Distinct sexual dimorphism is present in *Ompok bimaculatus* (Bloch). Females are nearly twice as long and five times heavier than males of the same age group (Fig. 1a, b). Dorsal profile of the head of the male has a clear downward slope, but is more or less straight in the female (Fig. 1a, b). A conspicuous, wide, crescent-shaped groove is present on the ventral side of the head in female, but absent in male (Fig 2a, b). The lateral line in the female has a downward bend at the middle of the body, while it is straight in male in the middle portion and slopes downwards only near the operculum (Fig. 1a, b). Eyes of the female bulge conspicuously, while

MORPHOLOGICAL DIFFERENCES BETWEEN THE MALE AND FEMALE OF
OMPOK BIMACULATUS (BLOCH)

	Male	Female
1. Average total length	14.8 cm	25 cm.
2. Average standard length	12.7 cm	22.3 cm
3. Maximum width	2.7 cm	5 cm
4. Average weight	20.5 gm	114.4 gm
5. Average head length	2.5 cm	4.2 cm
6. Average interorbital space	1.7 cm	2.8 cm
7. Average length of caudal peduncle	0.5 cm	0.8 cm

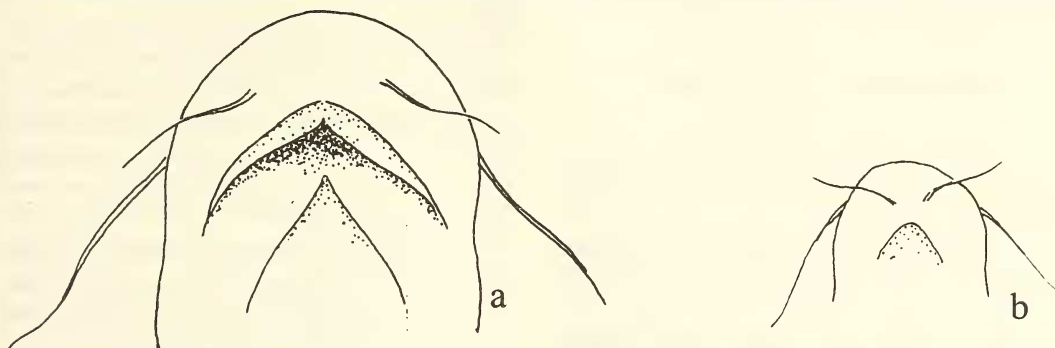


Fig. 2: *Ompok bimaculatus* (Bloch) ventral view of head: a. female; b. male

the male has very small eyeballs. (Fig. 1a, b). The maxillary barbels in female do not extend beyond the pectorals, while in males they extend beyond the pectorals (Fig. 1a, b). Central rays of the caudal fin in female have dark longitudinal stripes, but these are absent in males. The entire skin of the female is darker than that of the male.

Sexual dimorphism in fishes is exhibited in size and weight. In some fishes, the males are larger than females of the same age group, but in others the females are larger. Inasu (1993) observed that males are larger than females of the same age group in *Tetraodon travancoricus* Hora and Nair, while Tessy and Inasu (1997) observed that in the edible perch *Priacanthus*

hamrur (Cuv. and Val.) females are more than twice as large and heavy as males of the same age group. In *Ompok bimaculatus* (Bloch), the female is more or less twice as large and five times heavier than males of the same age group.

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